

BIOLOGY TECHNICAL NOTE

Habitat Development for Pollinator Insects

Two thirds of the world's crop species depend on insects for pollination, which accounts for 15-30% of the food and beverages we consume. Pollinators (insects, some birds and bats) are key to the function of many terrestrial ecosystems because they enhance native plant reproduction. Native plants provide food and cover for numerous wildlife species, help stabilize the soil and improve water quality. As a group, pollinators are threatened world-wide by habitat loss and fragmentation, pesticides, disease, and parasites. This has serious economic implications for humans and for native ecosystem diversity and stability.

The NRCS can assist landowners with habitat enhancement for pollinators by encouraging them to establish an array of plants that flower throughout the entire growing season to provide a source of nectar for adult pollinators and a diversity of herbaceous material for immature pollinator life stages.

Herbaceous plantings should include one grass adapted to the site and at least one forb or shrub from each of the three flowering categories, i.e. early, mid, and late which are listed below.

	Early Flowering Group	Mid Flowering Group	Late Flowering Group
Native:	Lewis Flax	Indian blanket flower	Indian blanket flower
	Yarrow	Maximilian sunflower	Maximilian sunflower
	American plum	Prairie coneflower	Prairie coneflower
	Black hawthorn	Purple prairieclover	Purple prairieclover
	Chokecherry	Rocky Mountain penstemon	White prairie clover
	Golden current	White prairieclover	Dotted gayfeather
	Red-osier dogwood	Common snowberry	Globe mallow
	Serviceberry	Western snowberry	Yarrow
	Skunkbush sumac	Yarrow	Big sagebrush
	Willow	Wood's rose	Cudweed sagewort
	Shrubby cinquefoil	Shrubby cinquefoil	Green sagewort
	Wood's rose	Red-osier dogwood	Shrubby cinquefoil
			Rubber rabbitbrush
			Green rabbitbrush
Introduced:	Alsike clover	Alfalfa	Birdsfoot trefoil
	Strawberry clover	White clover (ladino)	Cicer milkvetch
	White sweetclover	Small burnet	Sanfoin
	Yellow sweetclover	Yellow sweetclover	
	Sanfoin	Sanfoin	
	Caragana		
	Nanking cherry		
	Sand cherry		
	Lilac		
	Crabapple		

Pollinator habitat plantings must remain undisturbed throughout the growing season so that flowers are available as a nectar source to adults and succulent herbage can be utilized by larvae. Maintenance treatments, such as grazing, burning, or haying may be required outside of the flowering period. Native and introduced species are not compatible in the same planting. Plantings should be at least ½ acre in size.

To complete the habitat requirements of pollinator species, intersperse the kind of diverse plantings described above with various sources of cover, such as rock and log piles or trees with exfoliating bark and cavities, as well as a source of water (bird bath, damp, sandy area, small pond, etc.).